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REMARKS/ARGUMENTS

Reconsideration of this patent application is respectfully requested in view of the foregoing amendments and the following remarks.

The specification has been amended to insert appropriate section headings, to correct a statutory basis for a claim of priority and to delete a reference a claim number. A substitute Abstract has been provided.

Claims 19-26 have been canceled without prejudice. New claims 27 31 have been added.

Applicant submits that the term "matrix" recited in the pending claims relates to a structure into which another substance is embedded. In the context of the invention, a matrix comprises a structure into which particles of a detectable material are embedded. The matrix relating the invention is a three-dimensional structure which may take the form of a strip or any number of other shapes.

The Examiner raised a number of rejections to the claims under

35 USC § 112. With respect to the conveyor belt, new independent claim 27 recites as follows:

> (a) *a conveyer belt made of plastic, rubber or a rubber-like material, said conveyor belt comprising a carrying side and a running side;*
>
> (b) *a coding and marking system completely embedded in an edge region of said carrying side or an edge region of said running side of said conveyor belt such that a profile and function of said conveyer belt is not impaired ...*

Applicant submits that these features of the conveyor belt are appropriately supported in the written description, in particular at the paragraph at the bottom of page 8 of the specification. Applicant further submits that one of ordinary skill in the art would understand how and where the coding and marking system is embedded in a conveyor belt based on the disclosure provided.

Claims 23 and 24 were rejected as not enabled as circular and cylindrical segment coding formats were said to not be disclosed for a conveyor belt embodiment. Claims 23 and 24 have been canceled without prejudice.

Claims 19 and 20 relating to a scanner unit which is moved relative to an object were rejected as indefinite and not

enabled. Claims 19 and 20 have been canceled without prejudice and new independent claim 27 recites:

> c) *a static scanner unit for contact-free reading and detecting of said plurality of detectable material particles when said conveyor belt is moved passed said static scanner unit.*

Claims 19-26 were rejected under 35 USC § 103 based on any of US Patent Nos. 5,051,034; 5,762,461; and DE-A-196,20,582 (the "primary references") in view of either or both of U.S. Patent Nos. 4,832,204 and 4,225,780 ("secondary references"). The primary references were said to disclose embedding bar codes in objects for tracking or locating purposes. Secondary reference '204 was said to disclose tracking and locating packages in a conveyor belt system using bar codes. Secondary reference '780 was said to disclose putting bar codes directly on a conveyor belt. Essentially, it was the Examiner's position that it would have been obvious to one of skill in the art of conveyor belts and bar coding to embed a coding and marking system in a conveyer belt using the techniques of the primary references.

The rejections are respectfully traversed.

Primary reference '034 relates to a magnetically detectable plastic pipe wherein particles of magnetic material are embedded in the walls of the pipe or formed as a tape which is then co-extruded, fused or adhered to the pipe. Primary reference '461 relates to magnetizable guide elements which are embedded in a plastic trash receptacle to guide the pickup arm of a garbage truck.

Neither the '034 reference nor the '461 reference disclose or suggest a coding and marking system embedded in a moving conveyor belt as recited in claim 27 of the present application. Both the magnetically detectable pipe of the '034 reference and the trash receptacle of the '461 reference remain static or stationary with respect to a device used to detect the respective object. Thus neither the '034 nor the '461 reference disclose or suggest the feature of a static scanner unit for reading and detecting detectable particles embedded in a conveyor belt as the belt moves past the detector. Furthermore, neither reference discloses or suggests a solution to the problem of detection of a coding and marking system which is integrated with an object moving at a high speed. (see specification at page 2, last paragraph to page 3, second paragraph).

Reference DE-A-196,20,582 relates to detectable magnetic elements which for use with motor vehicle tires. A stationary sensor detects the movement of the magnetic elements and thus the rotation of the tire. The magnetic elements of DE-A-196,20,582 are inlaid into the walls of motor vehicle tires or alternatively applied in a rubber sheet which is adhered to the outer wall of the tire.

The DE-A-196,20,582 reference does not suggest a coding and marking system as claimed, wherein the coding and marking system is completely embedded in a conveyer belt and wherein detectable material particles are completely enclosed in a matrix. As shown in Figs. 1, 4 and 5 of the reference, the magnetic elements appear flush with a surface of the tire, and are not completely embedded therein.

The deficiencies of the primary references are not overcome by the secondary references cited. Although secondary reference '204 relates to tracking objects on a conveyor belt using bar codes, this reference discloses the affixing of coded labels to the packages themselves, not to the conveyor belt on which the packages are transported. Additionally, the coded labels

disclosed in the '204 reference transmit information by optical scanning (see col. 4, lines 55-68). Accordingly, the coded labels of the '204 reference would not be operable if completely embedded in a matrix and in a conveyor belt as claimed in the present application.

Secondary reference '780 relates to the field of magnetic recording. The bar code disclosed in this reference may be situated on a medium on a conveyor belt or on the conveyor belt itself. However, the '780 reference includes no disclosure or suggestion of a coding and marking system wherein particles of detectable materials are embedded and completely enclosed in a matrix which is completely embedded in a conveyor belt. Furthermore, there is no suggestion or motivation to combine the disclosure of the secondary references with that of the primary references.

Accordingly, Applicant believes that the references of record, taken either singly or in combination, neither suggest nor disclose the claimed invention. The Applicant believes that remaining claims 27-31 overcome the rejections of the Examiner and respectfully requests early allowance of the same.

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Respectfully submitted,

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ECR:EJC:kkw
Attach: Attachment A (replacement abstract)

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I hereby certify that this correspondence is being sent by facsimile transmission to the USPTO to Patent Examiner H. Pitts at Group No. 2876, to 1-(703) 872-9318 on March 5, 2004.

Elizabeth Collard Richter

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ATTACHMENT A